



**Office Locations:** Charleston, Columbia (2 locations), Greenville (2 locations), Pendleton, Rock Hill, Summerville, Sumter

**SOUTH CAROLINA MANUFACTURING EXTENSION PARTNERSHIP (SCMEP)** The SCMEP, headquartered in Columbia, SC, is a not-for-profit organization that focuses on helping small- to mid-sized manufacturing companies throughout the state by solving business and supply chain process problems. The SCMEP offers business and technology assessments, engineering expertise and lean manufacturing solutions to South Carolina manufacturers in search of a single solution for supply chain synchronization and internal optimization processes. The SCMEP provides this business and technology support to manufacturers through onsite consultations, partnerships with state technological schools and research universities to provide educational programs, online assessments and other business tools. Using the SCMEP's services enables manufacturers to see business benefits at a faster rate, at a more reasonable cost than using a private consultant and enhances economic development in South Carolina. Contact: John Irion, 817 Calhoun Street, scmep@scmep.org, Columbia, SC 29201, (803) 252-6976, Fax: (803) 254-8512. Email: scmep@scmep.org, Website: <http://www.scmep.org>

## THE MANUFACTURING EXTENSION PARTNERSHIP IN SOUTH CAROLINA

Manufacturing Extension Partnership (MEP) is a nationwide system of services and support for smaller manufacturers to become more globally competitive. At the heart of the system is a network of affiliated, locally-based manufacturing extension centers. Each center, like SCMEP, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

### STATE STATS

DATA\* COVERS JANUARY TO DECEMBER 2001

Number of projects completed with firms  
**741**

Number of firms served  
**500**

Number of firms served for  
the first time  
**192**

Federal cost share for current  
operating year  
**\$2,250,000**

State/other cost share for current  
operating year  
**\$4,500,000**

*\*Data as reported from center*

DATA\*\* COVERS JANUARY TO DECEMBER 2001

Increased sales & retained sales  
**\$129,756,000**

Client capital investment  
**\$50,237,800**

Total cost savings  
**\$24,234,750**

Jobs (created & retained)  
**759**

*\*\*Source: Independent client impact survey*

### COMPANY CLIPS

#### A Few Good Men Take Charleston Marine Container To The Next Level

Charleston Marine Container, Inc. (CMCI), established in the old naval shipyard in North Charleston in 1994, manufactures inter-modal shipping containers for the U.S. military. A subsidiary of Seacontainer, the company employs 151 people. CMCI is the only volume container manufacturer in the U.S. In late 1999 the company floundered under low production rates of only eight containers per day in its 240,000 square-foot facility. CMCI's future looked bleak. In July 2000, the company brought in retired U.S. Army Colonel Herb Ellis to turn the failing business around. He and a Citadel management team rose to the challenge U.K.-based parent company Seacontainer set out for them: make the business profitable in three to four months. With a lot of hard work, they pulled CMCI back from the brink of failure and moved it to just below the break-even point. To take the company to the next level—profitability—the team called in the South Carolina Manufacturing Extension Partnership (SCMEP).

SCMEP analyzed the situation and discovered that CMCI's primary challenge lay in quality management. The company had a mountain of poorly manufactured inventory warehoused; fully five people per assembly line devoted their days to reworking painting and welding problems. Additionally, CMCI had an exceptionally high rate of employee

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turnover, caused in part by insufficient hiring practices and inadequate training. Long supplier lead times, poor outsourced product quality, and mismanaged accounting practices rounded out the long list of company woes.

SCMEP conducted a Competitiveness Review (CR) to address a strategic plan and re-engineering approach, introducing the Theory of Constraints Management, which helped CMCI identify inhibitors to its ability to get product out the door. In response to its findings, CMCI moved its two welding production lines under one manager. This workforce redeployment maximized the use of skilled welding labor in first-pass assembly. SCMEP also recommended that CMCI develop and maintain a tracking system schedule and calculate a possible return-on-investment to determine if the welding process should be automated in the future. Additionally, SCMEP recommended that CMCI obtain customer quality requirements immediately and clearly communicate them throughout the company. To improve this aspect of production, CMCI undertook the documentation and training required to assure uniform acceptance and implementation of standards specified by the U.S. military.

Within one month of implementing SCMEP's recommendations, CMCI was producing 44 containers a day. Within two months the company had increased its throughput by nearly 30 percent and finally reached profitability, and by year-end, the plant was up to the management team's stretch goal of 50 containers per day. Not only did CMCI reach its profitability target in record time, it added an additional container line and signed a military contract to provide the new product. The company reworked its mountain of inventory according to new quality standards and shipped it to the customer, further enhancing its bottom line and significantly reducing costs.

### **Hendco Machine & Engineering Achieves ISO 9000 Certification**

Hendco Machine & Engineering was founded in Liberty, South Carolina by Al Hendricks, who has more than 30 years of experience in machining, most of it in the aerospace industry. Today Hendco is an aerospace and general machine shop employing three full-time employees who provide top-quality machined components, tooling, assemblies, and specialized parts to a variety of industries.

When Mr. Hendricks founded Hendco, he contacted the South Carolina Manufacturing Extension Partnership (SCMEP) to help the company achieve its growth goals and tackle existing constraints. Sales, the company's main constraint, had begun to trend downward. Intense competition in a saturated market prevented consistent production cycles, and the company found itself accepting undesirable jobs to stay afloat. Hendco needed to establish a marketing plan to attract consistent, quality business.

SCMEP recommended Hendco obtain ISO certification to grow the business the way Mr. Hendricks wanted. With SCMEP's help, Hendco applied for and was awarded a grant to pay for the typically prohibitive expenses associated with achieving ISO 9000 certification. With this certification, Hendco is able to attract customers from new industries and sectors. To compliment the company's quality guarantee, SCMEP helped it develop a strategic marketing plan and new collateral to advertise its ISO certification to prospective clients. In anticipation of sales growth stemming from a successful marketing strategy, SCMEP also recommended that Hendco develop internal systems to manage new business. Hendco will implement process-to-plan and control activities ranging from quoting to shipping. Also in the plans is a visual scheduling system that operators can use to determine which jobs are scheduled for each process involved. As the company grows, manufacturing software will be used to help facilitate much of the manual work, including quoting, purchasing, and inventory control.